

Amendment to the Specification:

On page 1, after the title and before line 1, please insert the heading:

Background

On page 2, before the paragraph beginning on line 8, please insert the heading:

Summary

Please delete the paragraph appearing on page 2, lines 10-11 in its entirety.

Please amend the paragraph on page 2, spanning lines 14-16 as follows:

These and other advantages of the invention are disclosed in the dependent claims and in the following description in which an exemplified embodiment of the invention is described with respect to the accompanying drawings. ~~It shows:~~

On page 2, before the paragraph starting on line 19, please insert the following heading and paragraph:

Brief Description of the Drawings

The invention may take form in various components and arrangements of components, and in various steps and arrangements of steps. The drawings are only for purposes of illustrating the preferred embodiments and are not to be construed as limiting the invention.

Please amend the paragraph on page 2, line 19 as follows:

Figure 1 ~~is~~ an MR apparatus for carrying out the method, and,

Please amend the paragraph on page 2, line 20 as follows:

Figures 2a, 2b, and 2c are Fig. 2 three panes to explain the inventive method.

On page 2, before the paragraph beginning on line 23, please insert the heading:

Detailed Description

On page 4, please amend the paragraph spanning lines 3-27 as follows:

In Figure 2a an object 20 to be scanned (e.g. the heart) which is surrounded by a rectangular area of interest 21 (e.g. part of the human body) is shown which will be scanned with the above mentioned MR apparatus 1 in parallel slices 22 which are set by the user. Imaging occurs in a rectangular area, the length thereof is determined by the Field-of-View (FOV) and the width thereof is determined by the so-called Rectangular Field-of-View (RFOV), which can be freely defined by the operator of the MR machine. The RFOV direction is also the foldover direction (and can be also a SENSE encoding direction), in ~~in~~ our example in Figures 2a, 2b, and 2c. As can be seen the longitudinal axis 23 of the object to be scanned is at an angle α to the direction z of the RFOV or to the z axis of the Cartesian coordinate system of the rectangular area of interest 21, i.e. the FOV. Thus, according to Figure 2b the slices 22 are rotated over an angle α in order to obtain an improved imaging of the object 20. However, since the slices 22 are normally kept in an exact parallel relationship, part of the slices 22 fall out of the area as covered by the original RFOV. When the angle α is for example 30° and the thickness B of the slices 22 is 1 cm with a gap of 0 cm between the slices 22, than then ~~the area 25 depicted in dashed lines~~ will cover 5 cm in vertical direction y. Now, according to Fig. 2c the rotated slices 22 are shifted in their longitudinal direction over a distance $B * \sin \alpha$ so that the start positions and the end positions of the slices 22 coincide approximately with the area of the RFOV. Thus, the slices 22 do not fall outside of the original RFOV from the slices before rotation (Fig. 2a) and any tissue outside of that area will not be covered any more,

thus preventing any backfolding artifacts. Especially for fast sampling methods like SENSE this is crucial as residual backfolding artifacts would lead to serious artifacts which cannot be suppressed easily. Additionally to the shift of the slices 22 the lines to be scanned within the slices 24 can have a uniform offset at a direction perpendicular to the direction of the respective slice 22. Additionally or alternatively the original RFOV may be diminished which leads to faster scanning.

On page 4, after the last paragraph ending on line 29, please insert the following paragraph:

The invention has been described with reference to the preferred embodiments. Modifications and alterations may occur to others upon reading and understanding the preceding detailed description. It is intended that the invention be constructed as including all such modifications and alterations insofar as they come within the scope of the appended claims or the equivalents thereof.